

5. A method of protecting a product in a package using building material components, the method comprising:

5 placing at least one foam structure in contact with the product;

the structure having sides and being formed to fit within the package;

the structure comprising:

10 a first side of the structure formed to protect the product;

a side of the structure capable of interlocking with an element to form a structural unit;

15 the foam structure protecting the product while the product is in contact with the foam structure within the package; and

the structural unit capable of being used as building material.

20 6. The method of Claim 5, further comprising shipping the foam structures while interlocked with other foam structures.

25 7. The method of Claim 5, further comprising storing the foam structures while interlocked with other foam structures.

30 8. The method of Claim 5, further comprising counting the foam structures while interlocked with other foam structures.

9. A packing structure comprising:
a first part formed to fit within a package and
having sides;
a second part formed to fit a product and having
5 sides;
a first side of the first part being formed to
accept a first side of the second part;
a side of the first part capable of interlocking
with an element to form a structural unit; and
10 the structural unit capable of being used as
building material.

10. The packing structure of Claim 9, wherein the
first part and the second part are made of differing
15 materials.

11. A packing structure comprising:
a first part formed to fit within a package and
having sides;
a second part formed to fit a product and having
5 sides;
a first side of the first part being formed to
accept a first side of the second part;
a side of the second part capable of interlocking
with an element to form a structural unit; and
10 the structural unit capable of being used as
building material.
12. The packing structure of Claim 11, wherein the
first part and the second part are made of differing
15 materials.

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13. A method of protecting a product in a package using building material components, the method comprising:

5 joining a first part having sides to a second part to form a shipping protection element, the shipping protection element fitting within the package and protecting the product;

a side of the first part capable of interlocking with an element to form a structural unit; and

10 the structural unit capable of being used as building material.

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14. A method of combining shipping protection structures to form building material, the shipping protection structure having a first part and a second part and the shipping protection structures protecting a product in a package, the method comprising:

5 disassociating the first part from the second part;

 joining the first part with an element to form a structural unit; and

 the structural unit capable of being used as

10 building material.

15. A structural unit capable of being used as building material, the unit being made from packing material for a product in a package, the unit comprising:

at least two foam structures having sides, at least
5 one of the foam structures comprising:

at least one side formed to engage the product in the package;

a side capable of interlocking with another foam structure to form the structural unit;

10 at least two foam structures interlocked together;
and

the foam structures capable of inhibiting damage to the product in the package.

15 16. The structural unit of Claim 15, wherein the unit comprises a portion of a construction product.

17. The structural unit of Claim 15, wherein the unit comprises a portion of a flotation product.

20 18. The structural unit of Claim 15, wherein the unit comprises a portion of a wall form for pourable building material.

25 19. The structural unit of Claim 18, wherein the unit comprises a portion of one side of a wall form, the unit further comprising an orifice in the unit for receiving a connector for attaching the unit to the wall.

30 20. The structural unit of Claim 18, wherein the unit comprises a portion of one side of a wall form, the wall form having a second side, the unit further

comprising an orifice in the unit for receiving a connector for attaching the unit to the second side of the wall form.

5 21. The structural unit of Claim 15, wherein the at least two foam structures are secured with adhesive when interlocked to create the structural unit.

10 22. The structural unit of Claim 15, wherein the at least two foam structures are secured with a fastening device when interlocked to create the structural unit.

15 23. The structural unit of Claim 15, further comprising a cavity in the unit, the cavity being filled with additional material.

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24. A structural unit capable of being used as building material, the unit being made from packing material for a product in a package, the unit comprising:

at least one foam structure having sides and being
5 formed to fit in the package, the foam structure comprising:

at least one side being formed to engage the product;

a side capable of interlocking with an element
10 to form the structural unit;

the foam structure capable of inhibiting damage to the product in the package; and

the structural unit having a conduit.

25. The structural unit of Claim 24, wherein the conduit is formed in the foam structure.

26. The structural unit of Claim 24, wherein the conduit is formed by the interlocking of the foam
20 structure to the element.

27. The structural unit of Claim 24, wherein the conduit is a conduit for the passage of electrical
conductors.

28. The structural unit of Claim 24, wherein the conduit is a conduit for the passage of air.

29. The structural unit of Claim 24, wherein the
30 conduit is a conduit for the passage of a fluid.

30. The structural unit of Claim 24, wherein the unit comprises a portion of a wall form for pourable building material.

5 31. The structural unit of Claim 30, wherein the unit comprises a portion of one side of a wall form, the unit further comprising an orifice in the unit for receiving a connector for attaching the unit to the wall.

10 32. The structural unit of Claim 30, wherein the unit comprises a portion of one side of a wall form, the wall form having a second side, the unit further comprising an orifice in the unit for receiving a connector for attaching the unit to the second side of
15 the wall form.

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33. A method of creating building material from packing material for a product in a package, the method comprising:

combining a foam structure and an element to create
5 a structural unit capable of being used as building material;

the foam structure formed to fit within the package and having sides;

the foam structure comprising:

10 a first side of the structure being formed to protect the product; and

a side of the structure capable of interlocking with the element to form the structural unit.

15 34. The method of Claim 33, wherein the step of combining combines a first foam structure with a second foam structure.

20 35. The method of Claim 33, wherein the step of combining combines a foam structure with an element comprised of wood.

25 36. The method of Claim 33, wherein the step of combining combines a foam structure with an element comprised of concrete.

37. The method of Claim 33, further comprising including the structural unit in a construction product.

30 38. The method of Claim 33, further comprising including the structural unit in a flotation product.

39. The method of Claim 33, further comprising including the structural unit in a wall form for pourable building material.

5 40. The method of Claim 39, further comprising creating an orifice in the structural unit and inserting a connector in the orifice, the connector attaching the unit to the wall.

10 41. The method of Claim 39, wherein the structural unit has an orifice, the method further comprising inserting a connector in the orifice, the connector attaching the unit to the wall.

15 42. The method of Claim 39, wherein the structural unit comprises a portion of one side of a wall form, the wall form having a second side, the method further comprising:

20 creating an orifice in the unit;
inserting a connector in the orifice; and
attaching the connector to the second side of the wall form.

25 43. The method of Claim 39, wherein the structural unit has an orifice and comprises a portion of one side of a wall form, the wall form having a second side, the method further comprising:

30 inserting a connector in the orifice; and
attaching the connector to the second side of the wall form.

44. The method of Claim 33, further comprising securing the foam structure and the element with adhesive.

5 45. The method of Claim 33, further comprising securing the foam structure and the element with a fastening device.

10 46. The system of Claim 33, wherein the structural unit has a cavity, further comprising filling the cavity with additional material.

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UNIFORM INTERLOCKING FOAM PACKING MATERIAL/
BUILDING MATERIAL APPARATUS AND METHOD

ABSTRACT

5 A foam structure for protecting a product in a
package can interlock with another foam structure,
concrete or wood to form a structural unit of building
material. The foam structure can be made of two nested
parts, which can be made of differing materials.

10 A structural unit that can be used as building
material can be made from packing material. A foam
structure that can be used to pack a product in a package
is interlocked with another foam structure, wood or
concrete to form the unit of building material. The
15 structural units can be used in construction products or
in flotation products. The structural units can be used
as part of a wall form and can be attached to the wall or
to the other side of the wall form with connectors. The
structural units can have conduits. The conduits can
20 pass electrical conductors, air, fluids, ducts or pipes.

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